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ABSTRACT

This paper presents a model of affective relationships and a review of a number of empirical studies based on the model. The fundamental aim of the model is to describe the life-span development of affective relationships, which are measured in terms of an individual's representation of a variety of significant interpersonal relationships. These central and relatively stable social relationships are thought to govern an individual's behavior in the context of socio-affective interaction. To assess the conceptual model, several instruments were constructed, including a Questionnaire of Affective Relationships, a Sentence Completion Test of Affective Relationships, and a Picture Affective Relationships Test. The review of the empirical studies suggests the existence, from infancy to old age, of at least five developmental stages of affective relationships and three rules of developmental transformations. (RH)

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LIFE-SPAN DEVELOPMENT OF AFFECTIVE RELATIONSHIPS

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This paper presents a model of affective relationships and a review of a number of empirical studies based on it. The model is proposed to describe the life-span development of affective relationships, which are measured in terms of one's representation of a variety of significant interpersonal relationships. These central and relatively stable social relationships are supposed to govern one's behaviors of socio-affective interaction. The review of the empirical studies suggests that there are at least five developmental stages of affective relationships from infancy to old age and three rules of developmental transformations.

Key words : affective relationships, life-span development, developmental stages

This article proposes a model of affective relationships —— the core and relatively stable social relationships —— in life-span perspective, and also reviews some empirical studies based on the model. The affective relationships are measured as representations of interpersonal relationships which regulate the behaviors of satisfying the need for affective interactions, by which I mean the need to have emotional ties or exchange love with significant others. These affective relationships will appear in a variety of ways, such as living together, exchanging warm attention and help, sharing information and pleasant/sad experiences, and getting psychic support. The relationships determine what I shall call the contents of affective behaviors, that is, the figures to whom the behaviors are directed, the functions of each figure, the behavioral modes used for each figure, and the likelihood of occurrence of each behavior.

HOW TO CONCEPTUALIZE AFFECTIVE RELATIONSHIPS

Affective relationships include many kinds of social relationships. Firstly, they naturally include love relationships, according to the taxonomy in terms of familiarity (Lewis, 1982), which refer to the most intimate social relationships among the three types : love, friend and acquaintance relationships. They also often include relationships with figures who do not belong to the most familiar class of persons. For example, some friends play a much more important role as psychic support than friends in a usual sense do. And it is also possible to have an affective relationship with a person or spiritual/symbolized one with whom one is not even personally acquainted like a respected person, a historical figure or God.

The earlier version of this paper was presented at a seminar held on the occasion of Prof. Michael Lewis' visit Tokyo, December 1984. Helpful comments from Professor Lewis are gratefully acknowledged. I would like to express my deep appreciation to Professor Giyoo Hatano for his insightful comments on this study. The overall conceptualization was substantially enriched by his suggestions.
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So-called attachment relationships form only a part of affective relationships. The term 'attachment' in Western countries, despite a number of discussions on its conceptual reconsideration (e. g., Kalish & Knudtson, 1976 ; Weinraub, Brooks & Lewis, 1977), has been used unfortunately in a limited and narrow sense (Hinde, 1982). Updated theory and research on 'attachment' have clarified the definition of the term in a recent monograph (Bretherton & Waters, 1985). In earlier work (e. g., Takahashi, in press-a ; in press-b), I used the term 'attachment' to refer to the core of social relationships. However, now I use the term 'affective relationships' instead of 'attachment relationships', because the term 'attachment' has a special connotation based on the Bowlby-Ainsworth theory. That is, the term 'attachment relationships' refers to a person's special relationships with those whom s/he perceives as stronger and/or wiser than s/he (Bowlby, 1977). Though this kind of relationship is surely observed not only in infants and young children but also among adults after separation/loss (Bowlby, 1980 ; Weiss, 1975), I would like to emphasize that in addition to that there are other close relationships within which an active exchange of affections can actually supply resources to cope with the grief of separation/loss and to help re-actualize oneself in her/his social life.

Though voluminous research has long concerned the development of social relationships, it has failed to give us clear pictures of social development. The first limitation comes from the traditional dyadic paradigm of research. Even infants, as social beings, have multiple relationships. However, most studies have investigated the social relationship between a child and one figure. The studies of the mother-infant relationship are a typical instance. Most of them have concerned the mother-infant relationship alone, and they have hypothesized, without recognizing how oversimplified their formulations are, that the quality of the mother-infant relationship was of paramount importance and governed all subsequent social development. Though the role of the mother is indeed conspicuous among infants, she is not the only figure to interact with and affect them. Moreover, if we consider the expanding and changing human relations as children grow older, we cannot accept the above deterministic hypothesis. Even when a few researchers have recognized this limitation, they have failed to find effective research strateiges to describe just who is affectively relating to whom, and how (Furman, 1984). Some studies (Kojima, Kawai, Yamada & Murakami, 1985 ; Lewis & Feiring, 1982) have begun to examine a triad and more relations in one and the same situation. Predictably, they have come to be forced to struggle with the complexity of human interactions. Lewis and his colleagues (Weinraub, Brooks, & Lewis, 1977 ; Lewis, 1982) propose a social network model to describe a whole social map of a person as a social being. However, I doubt whether the essence of an individual's social relationships can be depicted by the 'social object-function matrix' of a social network.

The second limitation is the lack of a life-span perspective. Usually, each study is limited to one developmental period. However, we cannot gain the true insights into the nature of development by taking the sum of the discrete results of studies each restricted to one specified developmental stage. The information on development itself is limited. In other words, we need a 'motion picture' of ongoing development which shows and explains transitions from stage to stage, as Jean Piaget has given us in successfully describing cognitive development. Having the life-span perspective, Piaget described the

nature of each stage in cognitive development. He unearthed many facts of how children develop and found certain 'buds' which are important in future development but are of little worth in the stage in which they first occur.

To cope with the above two limitations, I have constructed a conceptual model of affective relationships in life-span perspective (Takahashi, 1974). I wish this model to be very useful to trace the successive transitions from infancy to old age. Accordingly, the construction of the model started with mature adults who would have the most complex and structured social relationships. Using the model, I then tried to trace the development of affective relationships from infancy to adulthood as a successive process of transformations. We can reasonably hypothesize that though the need for affective relationships is present throughout life, the contents of affective relationships will vary depending on developmental stages.

The research inso social relationships among adults has already suggested their complexity of their content (e. g., Troll, 1985). First, adults have a good many figures toward whom to direct social behaviors, including family members, relatives, friends, colleagues, respected persons, and so forth. Secondly, they surely differentiate the behavioral functions among their figures. Because of these functional differentiations, they can have affective relationships with many figures concurrently. Thirdly, adults have many kinds of affective behaviors and display them corresponding to the figure, situation, and opportunity. Finally, the strength of affective need will vary from figure to figure. We reasonably assume that the observed affective behaviors among adults are regulated by those representations of social relationships which can be characterized in terms of the properties outlined above.

THE CONCEPTUAL MODEL AND ITS ASSESSING INSTRUMENTS

For constructing a conceptual model of affective relationships, I have started by examining characteristics of the relationships in mature adults. In this report affective relationships are described in terms of the following four properties :

1. The figure of affective behaviors, to whom the affective behaviors are directed ; a person has many kinds of such figures.

2. The psychic function of each figure ; there is a variety of functions from the central one of deep psychic support to the almost instrumental.

3. The mode of affective behaviors, by which the need for emotional ties, and thereby for affective relationships, is expressed ; affective behaviors may be symbolic (that is to say, indirect), direct but distal, and both direct and proximal.

4. The strength of the need for affective relationships ; the intensity or frequency of affective behaviors to each figure.

To assess the conceptual model among college students and adults, I constructed two instruments concerning the above four properties, a Questionnaire of Affective Relationships (AR-Q) and a Sentence Completion Test of Affective Relationships (AR-SCT) (Takahashi, 1974).

The AR-Q consists of 24 statements describing concrete affective behaviors, each of whose function is fulfilled by using a given mode of behavior, and requires separate ratings on each item for each of six figures (mother, father, one sibling, the closest friend, love

object and respected person) on a 5-point scale (e. g., 'If possible, I want to be with X all the time.', 'When I receive bad news, I want to be with X.', 'I feel reassured when X agrees with me.', 'X makes me feel life is worth living.'). The above six figures were selected as target figures whom college students had named as the important persons in their psychic life in a preliminary study. As it is quite probable that some subjects have other significant figures than these six, additional figures, such as husband, children, and other important figures, are also rated depending on the kinds of subjects. The strength of the need for an affective relationship with each figure is the total over 24 items. According to the total score, one or more primary and important figures, called the focus (foci) are designated. Though it is most logical to consider as focus (foci) of affective relationships the n figures scoring highest, among which there are no significant differences, we simplified the procedure by regarding as significant any score difference of 10 or greater. Further examinations of the criteria of focus are needed.

The AR-SCT consists of 16 items concerning the figures emotionally supporting each subject (e. g., 'For me, my mother is·····.', 'For me, my closest friend is·····.', 'For me, God is·····.'), and the functions of each possible figure in her/his psychic life (e. g., 'The one that gives me moral support and a standard of judgement is·····.', 'The one that makes me feel life is worth living is·····.'). The AR-SCT was designed to check the responses in AR-Q in a different way.

The studies with college students of both sexes (168 females and 277 males, 20 to 21 years old) (Takahashi, 1974 ; 1980) indicated : First, they had several affective figures, including parents, sibling (s), close friend (s) of the same gender, love object (s) of the opposite gender, and respected person (s). Second, they varied their modes of affective behaviors according to the figure and occasions. Third, they clearly differentiated the psychic functions between figures, that is, they had one or more primary figures (focus/foci) who constituted the most important part of their affective relationships, and also had a few figures for the next most important part, and many other figures for less important parts. This constellation of differentiated relationships with figure-function pairs was given the term 'affective structure'. Finally, there were several types of affective structure concerning which some figure (s) were assigned a relatively more important role as focus (foci) than other figures as Table 1 shows. Though all types had the common structural properties mentioned above, each type had its own configuration of affective relationships and ways in which the various behaviors represented these relationships.

Having a mature assortment of affective relationships as the model of the final state of an ongoing continuous development, we would be able to describe the set of relationships for each period of one's life span as one of the manifestations of that development. However, as we had a methodological difficulty in assessing the same ppoperties of affective relationships among both adolescents and children, what I thought most necessary was to construct an assessing instrument which measured the same quality of affective relationships among subjects who would find it difficult to respond to the AR-Q and AR-SCT.

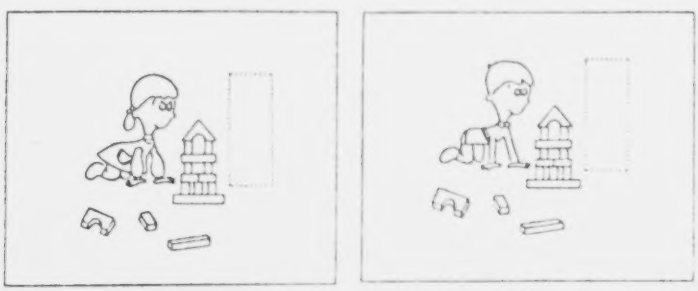
Using the conceptual model, I constructed a Picture Affective Relationships Test (PART) for young children (Takahashi, 1978). The PART consists of two sets of 8 to 18 cards, one set for girls and one set for boys. As shown in Figure 1, each card illustrates

TABLE 1

Number and Type of Affective Structure among College Students

Type of attachment structure	Female	Male
One-focus type	57	120
Mother type	15	2
Love object type	28	99
Closest friend type	4	9
Respected person type	8	9
Father type	1	1
Sibling type	1	0
Multi-focus type	196	152
Two-focus type	40	74
Three-focus type	40	54
Four-or more-focus type	26	24
Undifferentiated-focus type	5	5
Total	168	277

a daily life situation in which affective behaviors to another person will be induced in young children (e. g., 'When you play out of doors, whom would you like to play with you?', 'When you take a bath, whom would you want to take a bath with you?', 'When you want to read a book, with whom would you want to read a book?'). Testing is done individually, using a set of cards. During a test session, a child is asked to suppose the major figure in the picture is her/himself. Shown each card, a child is asked to tell the name of a person to whom s/he wants to relate (in the space of the dotted line). The relative strength of the need to relate toward each figure is the total frequency over all the cards. As the index of the relative dominance of figure (s), that is of type of focus, the figure, if any, which was named in more than half of the total PART cards was termed the dominant figure. The function of each figure is inferred from the situations in which the given figure is selected. In the case of the PART, the modes of social behaviors are not asked, because of the limited ability of young children to report. Children 4 to 6 years of age are interviewed



a b

FIGURE 1. PART Card (a: for girls, b: for boys) "When you play at home, who would you like to play with ?"

individually, and elementary schoolers (6 to 12 years of age) are given in groups the reduced-size edition of the PART for elementary school children. In the cases of 1- to 3-year-old children, the primary caregiver is individually asked how the child would respond to the PART for the very young children based on what s/he has already observed in the child's daily life.

Whether both PART and the two written instruments measure the same psychological constructs was examined among 13- to 14-year-old junior high school pupils. One hundred thirty two 9th graders of both sexes (70 boys and 62 girls) were administered the AR-Q and AR-SCT, and also, with two weeks' interval, the PART. For each affective behavior figure, there was a significant, positive correlation between PART and AR-Q ($r = .29$, $p < .05$ to $.56$, $p < .01$). However, there were three other significant correlations between the two measurements : among girls, the PART frequency of mother with both the AR-Q scores of sibling and those of closest friend of the same gender ($r = .30$, $p < .05$; $r = .26$, $p < .05$, rersectively) ; among boys, the PART frequency of mother with the AR-Q score of father ($r = .43$, $p < .01$). Moreover, 48 out of the total 132 children were identified as having a dominant figure in their affective relationships by the PART. Fifty percent of these 48 classified as one and the same focus type by the AR-Q, 31% of them got the highest AR-Q score and were rated as multi-focus types, but with one identifiable figure exceeding the others, and 10% got the second or third highest scores and were identified as multi-focus types with three or four figures about equally dominant. Two children were classified into undifferentiated-focus type, because of no clear score differences among six figures. Only 2 children were classified into a different one-focus type from PART by the AR-Q ; one peer-dominant type child was identified as respected- person-dominant type and one cousin-dominant type child was identified as peer type. From this overall harmony of results, we can conclude that the PART reveals the same kinds of affective figures and also the degree of importance, though it is a relative one, of each figure among children, as the AR-Q does among adolescents and adults. Depending on the same principle as the PART for children, I constructed a PART for elderly persons for whom the AR-Q and-AR-SCT might impose a burden. Consequently, depending on the conceptual model, I have the instruments to assess the affective relationships from infancy to old age.

TRANSFORMATIONS OF AFFECTIVE RELATIONSHIPS IN LIFE-SPAN DEVELOPMENT

Though it is controversial how we characterize the different stages in the course of development (e. g., Tanner & Inhelder, 1960), there are at least the following five stages in transformations of affective relationships. Let me review the empirical studies of affective relationships from a life-span perspective.

The first stage : Appearance of affective relationships

The first one is the stage of appearance of the affective relationships with figures who surround a baby. A large number of studies in attachment relationships have revealed that at the latest by the sixth month after birth, infants have established an attachment relationship with the caregiver, usually the mother, and that this has continued and deepened till around their 18th month (Waters, 1978). Our study, based on the strange-situation procedure (Takahashi, in press-a) indicated that 68% of sixty Japanese 12-month-olds from middle class families had established secure (B type) attachment relationship

with the mother. The PART interviews with their mothers indicated that these infants already had affective relationships with multiple figures, including mother, father, and grandmother. The infants directed affective behaviors to the mother the most frequently, and interacted with her in most important functions of their 'survival', such as feeding, sleeping, soothing and nursing. At the same time, 36% of these 12-month-olds preferred the father to the mother as partners in co-bathing and play, which might be more peripheral but joy-producing functions for the babies. According to Yamada (1982), who observed one Japanese 14-month-old infant in daily situations described that the boy had multiple figures whose roles for him were articulated with considerable interdependence and compensation of one another : mother as nurturant caregiver, grandmother as generous presenter of special candy, grandfather as expert of repairing toys, sibling as play partner. The results reported by the studies on fathers in the US were also consistent with the above findings. For example, American babies from middle class families, while remaining positively attached to both parents, began to respond discriminately to the father and the mother in their the 7th to 8th month (Lamb, 1976), preferring the father to the mother in task-oriented or playful situations (Lamb, 1980 ; Clarke-Stewart, 1978-a), and using the father as a secure base when the mother was absent (Lamb, 1976). Thus, the abundant data suggest that affective relationships of 1-year-olds consist of multiple figures with some differentiations in the role of each figure.

The second stage : Extension of affective figures

The second important stage of the development of affective relationships is the beginning of the active extension of figures among toddlers. Though we are unable to specify when this second phase starts, some studies indicate that children, before their second birthday, are ready to begin to extend affective behaviors even to strangers, such as a familiar female adult (Clarke-Stewart, 1975 ; 1978-b ; Bretherton, 1978 ; Main & Weston, 1981 ; Takahashi, 1982), a friendly female stranger (Bretherton, Stelberg & Kreye, 1981), or an unfamiliar female adult who imitated the mother's behavior (Shaffran, 1974) or who responded contingently (Levitt, 1980). Our three studies among the total of 89 toddlers revealed that 19 to 29-month-olds surely exhibited affective behaviors to the female adult strangers (Takahashi & Hatano, 1982 ; Takahashi, in preparation). The children were observed in their affective behaviors to the mother and also four kinds of strangers : unfamiliar young female students of age 23, a female and male stranger who belonged to the mother's generation, and an aged female stranger, 66 to 68 years old, in the standardized situations. The findings were as follows. The toddlers continued to exhibit the affective behaviors to the mother, most frequently using proximal modes of interactions, such as touching and approaching. At the same time, they directed affective behaviors to all the female strangers, regardless of age differences from the mother, using distal modes of interaction (mostly looking), which were very different ways of contacts from those with the mother. Yet, on the contrary, the toddlers often hesitated to have contact with a male stranger. Some of them refused even to look at him. These children stood with their back to him with closing their eyes. If we assume that affective behaviors are generalized based on the stranger's socio-cognitive similarity to the referent (s), the above results suggest that the toddlers directed affective behaviors to the female strangers probably because of their perceived resemblance to the referent, the mother. In addition,

it is worth noting that 64% of the total subjects who had included the father as the figure of affective relationships in their prior framework, as reported by the mother in the PART interview, directed affective behaviors to the male stranger than those whose mothers had not reported their having affective relationships with the father. That is, at the encounter with the male stranger, only the children who had had the father as a referent of affective relationship positively interacted with him. It is assumed that if the children had not had the father as an affective figure, they would have been forced to use the mother as referent and would have recognized the male stranger as too different from the referent figure to direct affective behaviors toward. From our observations here, we can reasonably hypothesize that the prior framework of relationships mediates new encounters.

Affective relationships among 2-year-olds, reported in the PART interviews with 89 mothers, surely indicated the extensions of affective behaviors to multiple figures. Some of them preferred to the father in co-bathing (24%) and going out (35%), sibling (s) in playing indoors (45%), and peer (s) in playing outdoors (48%), though they continued to have mother-dominant affective relationships. These facts suggest that the extensions of figures are surely accompanied by the successive examinations of the functions of each figure. It is hypothesized that when a child encounters a more competent or proper figure who can bring much more satisfaction in a given function than the figure (s) who is fulfilling the function at present, s/he will replace the prior figure with the new one. Thus, the extensions of figures is always accompanied by severe examinations and also articulations of the roles of the figures, both old and new. For safety, if not survival, these extensions will first be attempted in the peripheral functions, such as the play function.

The third stage : Socialization of affective relationships

The third critical stage will be characterized as the socialization of affective behaviors in formal organizations. When children enter kindergarten and school, they must be strongly and rapidly pushed to extend their social interactions to out-of-family members, especially to agemates. And they are also trained to learn the suitable affective behavioral modes for each figure and situation. If a child can not have good contacts with agemates in kindergarten, or strongly insists on affective relations with the mother in public, s/he will be called a 'maladaptive child', 'dependent child' or 'mama's girl (boy)'. In fact, the interests of researchers move to peer relationships or friendships in childhood from the mother-infant relationship in infancy. Some studies (e. g., Lewis & Brooks-Gunn, 1979) claimed that some children, even infants, approached an unfamiliar child without ever having encountered one before. Other studies reported (Bronson, 1981 ; Kagan, 1981) that toddlers are too young to interact actively with peers. Recently, some studies have been concerned with how the definition of friendship changes as children grow older (e. g., Youniss, 1980). The process of acquaintanceships among agemates has suggested children' s high abilities to form friendships (Furman, 1984 ; Oden, Herzberger, Mangione & Wheeler, 1984). However, it must again be emphasized that these previous studies isolated the agemate relationship from other relationships which must affect and interrelate with that relationships. Considered in a most favorable light, the researchers aimed to study just one relationship between a child and one 'dominant' figure in each developmental period.

Using the PART, five groups of children from 4 to 12 years old were interviewed on their affective relationships. They were children of pre-kindergarten (42 four-year-olds,

who were investigated at one month before entrance), kindergarten (71 six-year-olds, who had spent 18 months in kindergarten), and 2nd grade, 4th grade, and 6th grade (each about 200 children) (Takahashi, 1983). The results indicated that the children had several affective figures with differentiations of functions among figures. As shown in Table 2, the mother was the most important figure for pre-kindergarten children, but some of her functions were successively replaced by other figures as the child grew older.

There was only one card out of the 13 PART cards, a card of nursing when children were sick, to which the mother was most frequently assigned by the subjects of all three elementary school groups (See Figure 2). The father was included in the framework of affective relationships by half of the 4-year-olds as a co-bathing partner, and continued to be selected in rather peripheral or instrumental roles till 2nd grade and/or 4th grade, in such cards as 'When you travel in space---' and 'When you awake from a nightmare ---'. The agemates started to take their roles in the affective relationships as play partner outdoors among pre-kindergarten children. Siblings were selected as play partner at home. Peers gradually began to take more important roles and in the second year of kindergarten, they replaced the mother as going-out and reading partner, the father as going-out one and siblings as play-partner indoor. As Figure 3 indicates, among 6th graders, agemates were selected as the figures who shared emotional experiences, such situations as 'When something unhappy happens ---'.

TABLE 2

Figures of Affective Behaviors among Pre-Kindergarten and Kindergarten Children (%)

	Situation / Figure	Playing indoors	Playing outdoors	Reading together	Co-bathing	Going-out	Selecting menu	Sitting together	Asking words
4 year old *	Mother	8	3	35 (83.3)	17 (40.5)	22 (52.4)	27 (64.3)	19 (45.2)	31 (73.8)
	Father	4	2	4	19 (45.2)	14 (33.3)	4	9	7
	Sibling	17 (40.5)	3	0	4	0	0	6	1
	Agemate	8	30 (71.4)	0	0	1	1	2	0
	Others	4	4	3	1	5	3	6	3
	Alone	1	0	0	1	0	6	0	0
6 year old **	Mother	3	3	19 (40.4)	16 (34.0)	14 (29.8)	32 (68.1)	17 (36.2)	24 (51.1)
	Father	2	1	3	22 (46.8)	13 (27.7)	9	13 (27.7)	11 (23.4)
	Sibling	12 (26.1)	5	5	4	5	1	9	6
	Agemate	26 (55.3)	34 (74.5)	10 (21.3)	3	11 (23.4)	2	6	3
	Others	2	1	8	1	3	1	2	3
	Alone	2	0	2	1	1	2	0	0

* 42 children of one month before entrance of kindergarten.
** 71 children who spent 18 months in kindergarten.

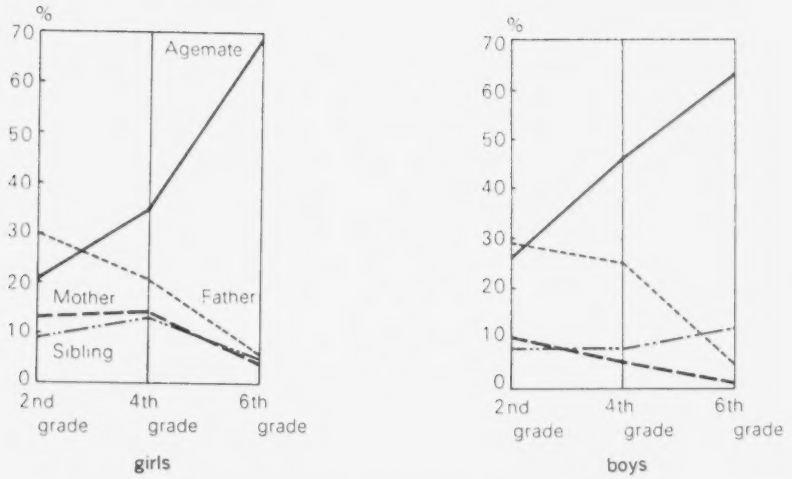


FIGURE 2. Figures Selected in PART Card of "When you travel in space" among Elementary Schoolers

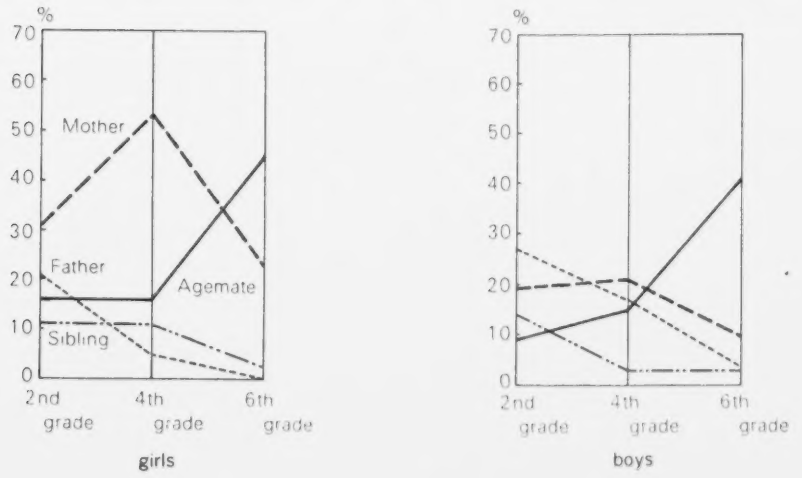


FIGURE 3. Figures Selected in PART Card of "When something unhappy happens" among Elementary Schoolers

Under the general waves of developmental changes, each child establishes her/his own framework of affective relationships. Figure 4 indicates the individual type of affective relationships in each age group. Among pre-kindergarten children, though 55% of them were identified as mother-dominant type, 7% of them were classified into father-dominant type. The mother-dominant type subjects decreased as they grew older, and both parent-dominant and family-dominant (including parents, sibling and some relatives) types increased instead till 4th grade. The agemate-dominant type children began to

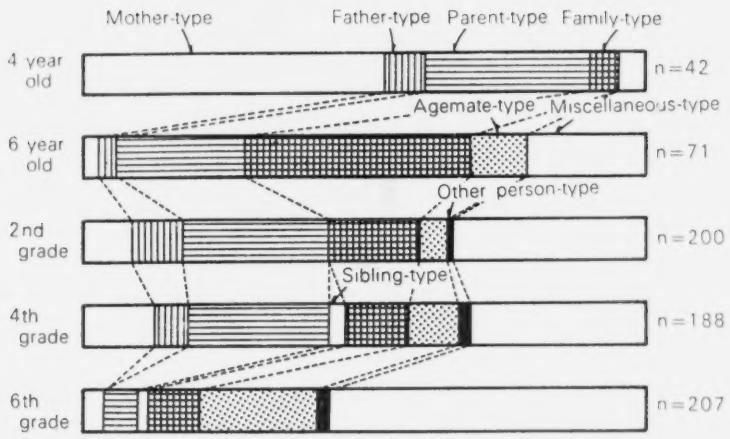


FIGURE 4. Types of Affective Structure among Children

appear among 10% of kindergarten children, and continued to increase through 6th grade. We have not had enough empirical research of the prior experiences of these agemate-dominant type children. However, the seven months' longitudinal observations after entrance to kindergarten indicated that the children who had included peers in their affective relationships before entrance much more easily interacted with agemates in daily play sessions in kindergarten. In a study elsewhere, the agemate-dominant type children behaved more cooperatively with an unfamiliar agemate partner in an experimental joint problem-solving situation than did the mother-dominant type kids (Nagata & Suzuki, 1983). The results suggest the importance of a child referent in the process of getting acquainted with agemates.

As shown in Figure 4, 59% of the 6th graders were identified as the miscellaneous-figure type. This divergent tendency in extension of affective figures can be considered as an outcome of the children continuously selecting or reassigning a more competent and suitable figure for each function under social exposures to new human relationships. Thus, the replacement of the prior figure (s) by a more competent and effective one is predominant among children in formal organizations.

The fourth stage : Appearance of focus

The fourth critical stage is for adolescents and young adults. The affective relationships may change dramatically when adolescents begin to reexamine their world existentially, trying to arrange their affective relationships to support or to be consistent with their philosophy of life or way of living, in other words their self-identity. The studies of adolescents and yound adults indicate the following two important nature of transformations of affective relationships among them (Takahashi, 1974 ; 1980). First, a focus (foci) appeared and increased as the subjects grew older (see Figure 5). Although our data among children suggest an endless process of the extension or replacement of figures, the findings indicate a centering tendency of figures in adolescents and adulthood. The focus (foci) was the figure who served the most important role, and many other figures

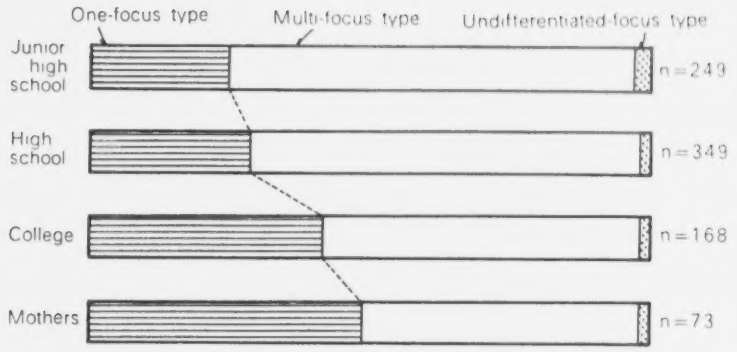


FIGURE 5. Types of Affective Structure among Female Adolescents and Adults

were assigned less important, but suitable roles. These differentiations of functions among figures suggested a structural nature of affective relationships. When the affective relationships actualized these structural characteristics, the framework could remain rather stable and independent of current environments, and substantially regulate the contents of affective behaviors irrespectively of what was going on in the world around one. The achievement of these structural characteristics cannot be interpreted independent from the self-identity which, after all, is formed by the integration of experiences. And, conversely, the stability of self-identity must be assured by the affective structure.

Secondly, though all types of affective relationships had the common structural characteristics, each type (the distributions of types are shown in Table 1) showed different affective behaviors. For example, the mother type of college students ranked the mother first in all modes of affective interactions and described her in positive-emotional terms, e. g., "My mother is a good adviser and my best psychic support". Besides the mother, they ranked the father and sibling higher than non-family members, such as friends of the same gender or a respected person. Few had a love object of the opposite sex. The mother-type students were concerned with family members and seemed not to be so active in other social interactions. On the contrary, the love-object-type students showed their interactions with many kinds of people including a number of nonfamily members. Though they defined the love object as "everything for me" and ranked him/her high in all modes of affective behaviors, they also directed affective behaviors to parents, siblings, friends of the same gender and the respected person with clear differentiations of the roles of these figures.

The further stages : Incessant transformations of affective relationships

Human beings must continue to transform their affective relationships continuously when they encounter life events. Each person idiosyncratically transforms and reconstructs her/his own relationships, experiencing those various encounters with and also separations from significant others which accompany employment, marriage, childbirth, divorce, retirement and death.

The data of the AR-Q and AR-SCT among married females (33 to 37 years old)

suggested certain transformations of affective relationships after marriage and also childbirth. That is, 42% of the seventy-three mothers, who had graduated from the same college as the subjects in the college group, 69% of whom were teaching music at school or home, were identified as husband-type. They described the husband as a figure who supported their psychic life and was an important partner in life. Though there was only one subject who was classified as child type, the mothers directed affective behaviors to their child (children) next to the husband. The child was defined as a person who made the mother feel life is worth living and whom one was forced to bear the responsibility for taking care of. Their own mother was the next important figure and was scored higher than the father and a close friend of the same gender.

The PART interviews in progress with aged persons, 61 to 78 year old, also suggest the further transformations of affective relationships. Ten out of 29 females were identified as having the child(children)-dominant-type of affective relationship, though three of them had the husband alive. Their children, 35 to 55 years old and already married supported the psychic lives of them. Fifteen of them had lost the husband through death, and stated that they could cope with the loss through psychic support by and interactions with the children. Besides the children, they included other figures in their affective relationships : the late mother and/or husband as a figure who brought peace of mind ; grandchildren as figures with whom they shared pleasant experiences and of whom they took care ; close friends to share such same-generation pleasures as shopping, chatting and flower arrangement ; other child (children) and relatives as travel partners or people to visit and/or talk with ; daughter-in-low as a familiar helper. The seven out of the eleven elderly women whose husbands were alive, assigned a more important role to the husband than those whose husband had died, though only two of them was identified as husband-dominant-type. One childless and divoced subject was identified as sibling-dominant-type. For her, an aunt was assigned the next important role. The other childless widow also included some relatives such as siblings, nephews and nieces in her affective relationships. Thus, it is suggested that human beings continuously and firmly transform their own affective relationships accompaning, coping with their changing lives and also aging.

RULES OF TRANSFORMATIONS OF AFFECTIVE RELATIONSHIPS

The conceptual model of affective relationships provides the assessing instruments and the research to trace the developmental transformations from infancy to old age. In the series of above-mentioned studies, I am mostly concerned with examining the transitions between stages of affective relationships, and the five stages are proposed to describe the transitions. The findings suggest that each subject transforms her/his own affective relationships throughout life. The course of transformations seems to me to be governed by the following three rules.

The first rule is the similarlity principle in extending affective behaviors to new figures. It is hypothesized that when subjects extend affective figures they use their prior framework of affective relationships. That is, in evaluating a potential figure they look for a suitable figure as referent who has traits similar to those of the new one, and who can somehow guide them as to whether the new figure is an appropriate one for affective behaviors or not. At least among Japanese toddlers, who usually are surrounded by

females as caregivers including aged ones, the similarity among adults was judged by gender, and age differences among female adults were not important. Therefore it is hypothesized that when the children encounter a stranger, first they will recognize the gender of the stranger, then they will select a figure, namely a referent, with whom they already have affective relationships considering the consonance of the gender. Further studies on social cognition should enrich our understanding of how people widen their circles of figures, though culture-bound customs and mores surrounding child rearing will influence the child's social cognition. That only the children who had had agemate (s) in their prior affective relationships easily played with peers of both genders in kindergarten suggested that in encountering children they would use a child as referent. Therefore, the age property must be critical in judging whether a given new figure belongs to child or adult.

The second rule is the satisfaction-increment principle in the replacements of figures of affective relationships. The findings suggest that, in the process of development, the functions of the prior figures of affective relationships are examined, and that some of these functions are moved to more competent figures. As the affective relationships concerned with the survival of human beings, children will begin to examine the potential replacements in the peripheral functions, such as playing, co-bathing and going out, and in those situations in which they are 或ealthy, alert, happy and secure from the fear for survival. Through the continuous examinations of replacements, the functions of each figure will be clarified and also refined. The replacements of figures among adolescents and adults are influenced not only by the nature of prior framework, but are certainly affected by other factors, such as one's life style, philosophy of living, and the self concept.

The third rule of transformations is the focusing principle, that is the appearance of focus (foci) in the framework among adolescents and young adults. Though the results of the study of childhood suggest a centrifugal tendency of the extensions of affective figures, the appearance of a focus in adolescence and young adulthood indicates the centripetal nature of affective relationships. The focus is the core of the affective relationships and characterizes the nature of each type of affective structure. According to Piaget, the development must be directed from centering to decentering. However, if human beings continue extending affective relationships endlessly to new figures, their social relationships will be in flux and unstable. With the focus, the affective relationships, the core part of social relationships, will develop a certain stability and consistency, though the structure will continue its tranformations to the last as events occur. It is also plausible to hypothesize that even infants have this focusing ability in selecting the figure, in that they can make a preference of one figure another, though the focusing dose not become clear until adolescence.

Thus, affective relationships are supposed to mediate the coming social interactions and it is plausible to assume that the affective relationships of each person have consistency through transitions. If we assessed the affective relationships of a person in each stage, we would find continuity between stages. On the contrary, as previous studies did (e. g., Kagan & Moss, 1962), if we examined separately the strength of affective behavior to a given figure, we would get low or insignificant correlations between stages, which led the authors to claim discontinuity of social behaviors. However, the discontinuity of the

strength of affective tendency toward a given figure is not incompatible with the continuity of the overall nature of affective relationships in each person.

REFERENCES

Bowlby, J. The making and breaking of affectional bonds. *British Journal of Psychiatry*, 130, 201-210, 1977.

Bowlby, J. *Attachment and Loss* : Vol. 3. Loss, Sadness and Depression. New York : Basic Books, 1980.

Bretherton, I. Making friends with one-year-olds : An experimental study of infant-stranger interaction. *Merrill-Palmer Quarterly*, 24, 29-52, 1978.

Bretherton, I., Stelberg, U. & Kreye, M. Engaging strangers in proximal interaction : Infants' social initiative. *Developmental Psychology*, 17, 746-755, 1981.

Bretherton, I. & Walters, E. Growing points of attachment theory and research. *Monographs of the Society for Research in Child Development*, 50, 1-2, 1985.

Bronson, W. C. *Toddlers' Behavior with Agemates : Issues of Interaction, Cognition, and Affect*. Norwood, New Jersey : Ablex. 1981.

Clarke-Stewart, K. A. *Sociability and social sensitivity : Characteristics of the stranger*. Paper presented at the meeting of the Society for Research in Child Development. Denver, Colorado. 1975.

Clarke-Stewart, K. A. And daddy makes three : the father's impact on mother and young child. *Child Development*, 49, 466-478, 1978-a.

Clarke-Stewart, K. A. Recasting the lone stranger. In J. Glick & K. A. Clarke-Stewart (Eds.), *The Development of Social Understanding*. New York : Gardner. 1978-b.

Furman, W. some observations on the study of personal relationships. In J. C. Masters & K. Yarkin-Levin (Eds.), *Boundary Areas in Social and Developmental Psychology*. London : Academic Press, 15-42. 1984.

Hinde, R. A. Attachment : Some conceptual and biological issues. In C. M. Parkes & J. Stevenson-Hinde (Eds.), *The Place of Attachment in Human Behavior*. New York : Basic Books. 60-76, 1982.

Kagan, J. & Moss, H. A. *Birth to Maturity : A Study in Psychological Development*. New York : Wiley. 1962.

Kagan, J. *The Second Year : The Emergence of Self-awareness*. Boston : Harvard University Press. 1981.

Kojima, H., Kawai, Y. Yamada, Y. & Murakami, K. *Development of sibling-relationship in infancy*. Paper presented at the meeting of Japanese Educational Psychology. 1985.

Kalish, R. A. & Kundtson, F. W. Attachment versus disengagement : A life-span conceptualization. *Human Development*, 3, 171-181, 1976.

Lamb, M. Interactions between eight-month-old children and their fathers and mothers. In M. Lamb (Ed.), *The Role of the Father in Child Development*. New York : Wiley. 1976.

Lamb, M. The development of parent-infant attachments in the first two years of life. In F. A. Pedersen (Ed.), *The Father-infant relationships*. New York : Praeger. 1980.

Levitt, M. J. Contingent feedback, familiarization, and infant affect : How a stranger become a friend. *Developmental Psychology*, 16, 425-432, 1980.

Lewis, M. & Brooks-Gunn, J. *Social Cognition and Acquisition of Self*. New York : Plenum. 1979.

Lewis, M. & Feiring, C. Some American families at dinner. In L. Loasa & I. Sigel (Eds.), *The Family as a Learning Environment*. Vol. 1. New York : Plenum. 1982.

Lewis, M. The social network system model : Toward a theory of social development. In T. M. Field, A. Huston, H. C. Quay, L. Troll & G. E. Finley (Eds.), *Review of Human Development*. New York : Wiley, 180-214, 1982.

Main, M & Weston, D. R. The quality of the toddler's relationship to mother and to father : Related to conflict behavior and readiness to establish new relationships. *Child Development*, 52, 932-940, 1981.

Nagata, C. & Suzuki, M. *Development of interpersonal relationships among kindergarten children*. Unpublished graduation thesis of Kunitachi College of Music (in Japanese). 1983.

Oden, S., Herzberger, S. D. Mangione, P. L. & Wheeler, V. A. Children's peer relationships : An examination of social processes. In J. C. Masters & K. Yarkin-Levin (Eds.), *Boundary Areas in Social and Developmental Psychology*. London : Academic Press. 131-160, 1984.

Shaffran, R. Modes of approach and the infant's reaction to the stranger. In Décarie (Ed.), *The Infant's Reaction to Strangers*. New York : International Universities Press. 1974.

Takahashi, K. Development of dependency among female adolescents and young adults. *Japanese Psychological Research*, 16, 179-185, 1974.

Takahashi, K. The measurement of attachment among young children. Paper presented at the meeting of Japanese Psychological Association. 1978.

Takahashi, K. Attachment among male college students. *Monograph of Kunitachi College of Music*, 14, 131-142 (in Japanese). 1980.

Takahashi, K. Attachment behavior toward a female stranger among Japanese 2-year-olds. *Journal of Genetic Psychology*, 140, 299-307, 1982.

Takahashi, K. & Hatano, G. Extensions of attachment objects among Japanese toddlers. *Annual Report 1980-1981* Research and Clinical Center for Child Development of Hokkaido University, 9-18, 1982.

Takahashi, K. Development of personal relationships. In K. Miyake, J. Murai, G. Hatano & K. Takahashi (Eds.), *Handbook of Child Psychology*. Tokyo : Kanekoshobo, 607-639 (in Japanese). 1983.

Takahashi, K. Examining the strange-situation procedure with Japanese mothers and 12-month-old infants. *Developmental Psychology*, in press-a.

Takahashi, K. The role of personal framework of social relationships in socialization studies. In H. Azuma, H. Stevenson & K. Hakuta (Eds.), *Child Development and Education in Japan*. New York : Freeman, in press-b.

Takahashi, K. Age and Gender of adult strangers as determinants of extension of attachment behaviors among Japanese toddlers, in preparation.

Tanner, J. M. & Inhelder, B. *Discussions on Child Development*. London : Tavistock Publications. 1960.

Troll, L. E. *Early and Middle Adulthood*. Second Edition. Monterey, California : Brooks/Cole Publishing Company. 1985.

Waters, E. The reliability and stability of individual differences in infant mother attachment. *Child Development*, 49, 483-494, 1978.

Weinraub, M. & Brooks, J. & Lewis, M. The social network : A reconsideration of the concept of attachment. *Human Development*, 20, 31-47, 1977.

Weiss, R. *Marital separation*. New York : Basic Books. 1975.

Yamada, Y. Expressions of request and rejection and the emergence of self in infancy. *Japanese Journal of Educational Psychology*, 30, 38-48 (in Japanese). 1982.

Youniss, J. *Parents and Peers in Social Development : A Sullivan-Piaget Perspective*. Chicago : University of Chicago Press. 1980.